



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,858	11/26/2002	Rollie Richard Herzog	9D-20014	3381

23465 7590 01/11/2006

JOHN S. BEULICK  
C/O ARMSTRONG TEASDALE, LLP  
ONE METROPOLITAN SQUARE  
SUITE 2600  
ST LOUIS, MO 63102-2740

EXAMINER
----------

PERRIN, JOSEPH L

ART UNIT	PAPER NUMBER
----------	--------------

1746

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/065,858

Applicant(s)

HERZOG ET AL.

Examiner

Joseph L. Perrin, Ph.D.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 8-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. In view of applicant's amendment the claim rejections under 35 USC §112, first and second paragraph, have been withdrawn.
2. Applicant's arguments filed 08 November 2005 have been fully considered but they are not persuasive.
3. Regarding claim 1 and in response to applicant's arguments that CHAMBERLIN does not disclose causing the lid to be locked when the sensed speed exceeds a first "predetermined" speed; causing the lid to remain locked after the first speed is reached; and causing the lid to be unlocked when the sensed speed is below a second "predetermined" speed different from the first speed. This is not persuasive because applicant's argument that the lid to remains locked after the first speed is reached does not distinguish the claims from CHAMBERLIN since it is clear that this occurs in CHAMBERLIN as well. There is no suggestion or disclosure in CHAMBERLIN of the contrary. Furthermore, applicant's broad recitation of "predetermined" speeds read on any speeds and not a particular value or range of speeds. It is noted that the term "predetermined" is considerably broad in scope and reads on any speed that is known and it is further noted that the language "predetermined" has been held as indefinite for reasons to be similar (see *Seagram & Sons Inc. v. Mazall* 84 USPQ 180). Thus, since CHAMBERLIN discloses causing the lid to be locked at any speed (first "predetermined" speed) above a speed (for instance, 20 or 100 RPM) and causing the lid to be unlocked

at any speed (second “predetermined” speed) below a speed (for instance, 20 or 100 RPM), the position is taken that the above and below speeds are “predetermined” speeds and therefore, CHAMBERLIN anticipates applicant’s claimed invention. Even if, *arguendo*, one were to construe applicant’s “predetermined” speeds and specified values or ranges and/or one “predetermined” speed being greater than the other “predetermined” speed, the position is taken that CHAMBERLIN still anticipates applicant’s claimed invention since the lid must be either locked or unlocked between such speeds. That is, in applicant’s claimed invention there is still only one threshold speed in which the lid is locked above the speed and unlocked below the speed, and the different speeds with which the lid is locked and unlocked, above and below the a “predetermined” speed are, in fact, all “predetermined” speeds.

4. Regarding claims 8 & 14, applicant’s arguments are substantially cumulative to the arguments regarding “predetermined” speeds in claim 1, and are not persuasive for reasons of same indicated above.

5. Regarding the §103(a) rejection of claims 10-12 & 16 over CHAMBERLIN in view of HUANG or HARWOOD, applicant appears to argue reasons of same above for CHAMBERLIN. This is not persuasive for reasons of same above. There does not appear to be any arguments directed to the obviousness combination. Thus, in response to applicant’s arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

***Claim Rejections - 35 USC § 102***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-5, 8-9, 13-15 & 17 are rejected under 35 U.S.C. 102(e) as being anticipated by CHAMBERLIN. Re claims 1-2, 5 & 8-9, CHAMBERLIN discloses a washing machine lid locking control method including sensing a rotational spin speed of rotary shaft 25 and basket 22 and locking lid 20 when the speed is above a predetermined speed (col. 5, line 39 – col. 6, line 6), locking with a control circuit 64 by energizing a lid lock solenoid (actuator 120) and unlocking/deenergizing the lid lock when the speed falls below a predetermined speed (col. 5, lines 47-52; col. 6, lines 3-9). Re claims 3-4 & 13, CHAMBERLIN further discloses the washing machine having a drive shaft extending from a clutch system 28, at least one magnet (magnetizable counterweight 30, screws 31 and/or brake plate 34) and a sensor 60/70, and generating a voltage signal from a frequency signal from the sensor using a frequency to voltage converter (col. 5, lines 45-54) (see also Figure 2 and relative associated text). Re claims 14-15 & 17, CHAMBERLIN discloses the claimed washing machine structure (cited above).

***Claim Rejections - 35 USC § 103***

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 10-12 & 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHAMBERLIN in view of HUANG or U.S. Patent No. 5,768,728 to HARWOOD *et al.* (hereinafter "HARWOOD"). Recitation of CHAMBERLIN is repeated here from above. Although CHAMBERLIN implicitly discloses "flip flop" circuitry (binary logic circuitry, col. 5, lines 47-52) and a timer (circuit 64 sensing signals over time, col. 4, lines 18-21), CHAMBERLIN does not expressly disclose a rotary drive speed sensing circuitry including a flip flop with a timer and a Hall sensor. HUANG teaches that it is known to provide a DC brushless motor (well known in the art as a conventional washing machine motor) with a Hall sensor and a flip flop to sense rotor position for advantages such as "increased reliability, wider temperature operating range, etc. in a cost effective manner, i.e. without having to replace the entire existing motor drive." (see, for instance, col. 2, lines 4-14 of Huang). HARWOOD teaches that it is conventional to use Hall sensors in detecting spin speed in washing machines (see, for instance, col. 5, lines 60-62). Therefore, it would be well within the knowledge of ordinary skill in view of the teachings of HUANG or HARWOOD to provide a conventional brushless DC motor with a Hall effect sensor or a "virtual" Hall effect sensor to provide the well-known advantages associated with such conventional sensing means. Furthermore, there would be a reasonable expectation of success in using the teachings of HUANG of applying such conventional sensing means to sense rotary speed in a rotary motor, for instance, in an appliance such as a washing machine since applicant has not disclosed that the use of a Hall effect sensor solves any stated problem or is for any particular purpose and it appears that the invention would perform

equally well with various spin speed sensing means and the selection of any of these known equivalents to provide a spin speed of a rotary device would be within the level of ordinary skill in the art. Therefore, the position is taken that a person of ordinary skill in the art at the time the invention was made would have been motivated to modify the washing machine of CHAMBERLIN with the Hall sensor of HUANG for at least the aforementioned reasons.

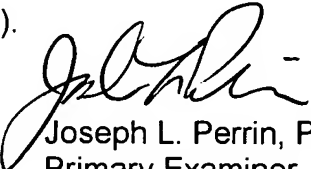
### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
11. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

Art Unit: 1746

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Joseph L. Perrin, Ph.D.  
Primary Examiner  
Art Unit 1746

jlP